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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/922,220	08/03/2001	Israel Rubinstein	U 013579-0	8917

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EXAMINER	
ALEXANDER, LYLE	
ART UNIT	PAPER NUMBER
1797	
MAIL DATE	DELIVERY MODE
01/07/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/922,220	RUBINSTEIN ET AL.	
	Examiner	Art Unit	
	Lyle A. Alexander	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 October 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *213-243,246-253,263-282,285-299 and 303-309* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *213-243,246-253,263-282,285-299 and 303-309* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 213-243, 246-253, 263-282, 285-299, 303-309 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Bowen et al. (USP 4,802,761).

Bowen et al. teach a method and apparatus for analyzing samples by Raman spectroscopy (SERS or SERRS). A substrate contains metal sol particles and is placed in contact with the sample where analytes attaches to the particles. Column 5 teaches Laser and monchromator are tuned in the range of 220-900 nm to create a Plasmon resonance phenomenon that is quantified by a detector. Column 6 line 19 teaches the metals selected for the island include silver and copper which are identical to the claimed metals. Column 6 lines 55-65 teach algorithms are used to compare the spectra to quantitatively/qualitatively identify the analytes. Column 9 lines 33-41 teach use of Raman standards to ensure calibration which has been read on the claimed first structure and first measurement (e.g. this measurement is a blank where the reading is made in the absence of the analyte). Column 9-10 lines 60-38 respectively teach the analyte is absorbed or associated with the metal sol particles which have been read on the second measurement. Bowen et al. teach in columns 9-10 the various embodiment depicted by the figures. Column 9 lines 7-33 describe the simplest embodiment where the laser light from optical fiber bundle(41) is directed down the cell tube(42) and the

subsequent radiation is collected in optical fiber(41). The Office has read this as the laser light is being transmitted through the cell(40) [e.g. along the length of the cell].

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 244-245,254-262,300-302, 310-318 and 321-330 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowen et al.

See Bowen et al. supra.

Bowen et al. are silent to the specific conditions for the creation of the metal layers.

The court decided In re Boesch (205 USPQ 215) that optimization of a result effective variable is ordinarily within the skill of the art. A result effective variable is one that has well known and expected results. The method selected for binding the metal sol particles would have been a result effective variable having the well known and expected results of attachment of the metal sol particles to the substrate.

It would have been within the skill of the art to modify Bowen et al. and use the claimed methods of metal deposition as optimization of a result effective variable to achieve the well known and expected results of sol metal particle attachment.

Claims 283-284 and 319-320 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowen et al. in view of Shibata et al.

See Bowen et al. supra.

Bowen et al. is silent to the use of metal oxides.

Shibata et al. teach the equivalence of metals and metal oxides. Shibata et al. also teach metal oxides are advantageous because they have higher melting points and will degrade less over time.

It would have been within the skill of the art to further modify Bowen et al. in view of Shibata et al. and use metal oxides to gain the above advantages.

Response to Arguments

Applicant's arguments filed 10/14/08 have been fully considered but they are not persuasive.

Applicant states Bowen et al. teach a Raman signal that is an emitted signal which is different from the claimed signal transmitted through the structure. The Office maintains the instant claim language does not define over Bowen et al. Specifically, Bowen et al. teach in columns 9-10 the various embodiment depicted by the figures. Column 9 lines 7-33 describe the simplest embodiment where the laser light from optical fiber bundle(41) is directed down the cell tube(42) and the subsequent radiation is collected in optical fiber(41). The Office has read this as the laser light is being transmitted through the cell(40) [e.g. along the length of the cell].

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Farquharson et al. (USP 6,623,977) teach in the abstract a metal sol matrix that is irradiated by laser light to generate surface plasmons. Figure 7B and

"Example 4" describe an embodiment where Raman scattering is collected from the opposite side of the sol matrix. With respect to the claimed analysis with and without sample in the matrix, the Office would take the position it is notoriously well known to use a blank run for comparison or in view of Bowen et al. who teaches a blank run. These rejection may be applied upon further appeal.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lyle A. Alexander whose telephone number is 571-272-1254. The examiner can normally be reached on Monday, Tuesday and Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Lyle A Alexander
Primary Examiner
Art Unit 1797

/Lyle A Alexander/
Primary Examiner, Art Unit 1797